

## **REMARKS**

This is a full and timely response to the outstanding non-final Office Action mailed September 8, 2003. Reconsideration and allowance of the application and presently pending claims are respectfully requested.

### **Present Status of Patent Application**

Upon entry of the amendments in this response, claims 42-61 remain pending in the present application. More specifically, claims 2-8, 10-16, 19-23, 25-32, and 34-41 have been canceled without prejudice, waiver, or disclaimer. Claims 1, 9, 17-18, 24, and 33 had been canceled in a previous response. Consequently, upon entry of this amendment, claims 1-41 stand cumulatively canceled.

New claims 42-61 add no new matter to the present application.

Reconsideration and allowance of the application and presently pending claims are respectfully requested.

### **Claim Rejections under 35 U.S.C. § 102(b)**

#### **a) Statement of the Rejection**

Claims 2-8, 10-16, 19-23, 25-32 and 34-41 have been rejected under 35 U.S.C. 102(b) as being anticipated by Lear, U.S. Patent 5,633,527.

#### **b) Response to the Rejection**

Claims 2-8, 10-16, 19-23, 25-32 and 34-41 are cancelled without prejudice, waiver, or disclaimer, and therefore, the rejection to these claims are rendered moot. Applicant reserves the right to pursue the subject matter of these cancelled claims in a continuing application, if Applicant so chooses, and does not intend to dedicate any of the cancelled subject matter to the public.

**Remarks related to new claims 42-61**

**Independent Claim 42**

Applicants respectfully assert that Lear does not disclose, at least, that part of Applicants' claim 42 wherein "first and second reflectors are configured to provide at least one optical path from the second reflector to the first reflector such that light travelling in this optical path *traverses the non-concave first surface of the first layer before undergoing reflection* back towards the second reflector."(Emphasis added). Attention is drawn to Applicants' disclosure, especially to Figures 5, 7, and 9 together with their related description, for appropriate details related to this claim.

The Office Action alleges that the cited prior art (Lear) discloses in Figure 8, "a non-concave reflector (64) including an outer layer of material (44) that emulates a concave mirror." Furthermore, Lear allegedly discloses that "the outer layer includes a substantially convex, outer surface (14)."

Lear's outer layer of material (44) is described in his Col. 12, lines 29 – 33, as comprising "a plurality of spacer layers 40 (defined herein as a layer 40 that has a refractive index that is higher than that of the lower-refractive index portion 28) located between a plurality of lower-refractive-index portions 28 formed in the sub-layers..."

Consequently, Applicants respectfully assert that light traveling from stack mirror 62 towards stack mirror 64, undergoes reflection in the "outer layer of material (44)" *before* traversing the alleged "substantially convex, outer surface (14)." This is in contrast to Applicants' claim 42 wherein the reflection takes place *after* traversing the non-concave first surface ("*traverses the non-concave first surface of the first layer before undergoing reflection*").

The advantages of the Applicants' claim elements, including the one referred above, over the prior art has been described in the Applicants' disclosure. Attention is specifically drawn to the Background section, which explains the shortcomings of the existing art.

Applicants respectfully re-assert that Lear does not disclose, at least, that part of Applicants' claim 42 wherein "first and second reflectors are configured to provide at least one optical path from the second reflector to the first reflector such that light travelling in this optical path *traverses the non-concave first surface of the first layer before undergoing reflection* back towards the second reflector."(Emphasis added).

Consequently, Applicants respectfully request allowance of claim 42.

### **Independent Claim 50**

Applicants respectfully assert that Lear does not disclose at least, that part of Applicants' claim 50 claiming "*a non-reflecting active region between the non-concave second surface of the first reflector and the planar first surface of the second reflector.*" (Emphasis added).

Attention is drawn to Applicants' disclosure, especially to Figures 5, 7, and 9 together with their related description, for appropriate details related to this claim.

The Office Action alleges that the cited prior art (Lear) discloses in Figure 8, "a non-concave reflector (64) including an outer layer of material (44) that emulates a concave mirror." Furthermore, Lear allegedly discloses that "the outer layer includes a substantially convex, outer surface (14)."

Lear's outer layer of material (44) is described in his Col. 12, lines 29 – 33, as comprising "a plurality of spacer layers 40 (defined herein as a layer 40 that has a refractive index that is higher than that of the lower-refractive index portion 28) located between a plurality of lower-refractive-index portions 28 formed in the sub-layers..."

Consequently, Applicants respectfully assert that light traveling in Lear's "light-active region 42" towards stack mirror 64, undergoes reflection in the "outer layer of material (44)" before traversing the alleged "substantially convex, outer surface (14)." This is in contrast to Applicants' "non-reflecting active region" that is bounded in part by a non-concave second surface, consequently leading to reflection after light has traversed the non-concave second surface.

In this connection, attention is drawn to Applicants' Figure 7 and related description (page 13, line 19 to page 14, line 1), which describes an active region 706 that "can comprise an intrinsic (*i.e.*, doped or lightly doped) semiconductor layer," and "a reflector 502 above the active region 706."

Applicants respectfully re-assert that Lear does not disclose at least, that part of Applicants' claim 50 claiming "*a non-reflecting active region between the non-concave second surface of the first reflector and the planar first surface of the second reflector.*" (Emphasis added).

Consequently, Applicants respectfully request allowance of claim 50.

### **Independent Claim 58**

Applicants respectfully assert that Lear does not disclose, at least, that part of Applicants' claim 58 that is a method of reflecting light, wherein light reflected by the second reflector traverses the non-concave first surface before undergoing reflection at the first reflector.(Emphasis added). Attention is drawn to Applicants' disclosure, especially to Figures 5, 7, and 9 together with their related description, for appropriate details related to this claim.

The Office Action alleges that the cited prior art (Lear) discloses in Figure 8, "a non-concave reflector (64) including an outer layer of material (44) that emulates a concave mirror." Furthermore, Lear allegedly discloses that "the outer layer includes a substantially convex, outer surface (14)."

Lear's outer layer of material (44) is described in his Col. 12, lines 29 – 33, as comprising "a plurality of spacer layers 40 (defined herein as a layer 40 that has a refractive index that is higher than that of the lower-refractive index portion 28) located between a plurality of lower-refractive-index portions 28 formed in the sub-layers..."

Consequently, Applicants respectfully assert that light traveling from stack mirror 62 towards stack mirror 64, undergoes reflection in the "outer layer of material (44)" before traversing the alleged "substantially convex, outer surface (14)." This is in contrast to Applicants' reflection after traversing the non-concave first surface, which in part, describes Applicants' method of claim 58.

The advantages of the Applicants' claim elements over the prior art has been described in the Applicants' disclosure. Attention is specifically drawn to the Background section, which explains the shortcomings of the existing art.

Applicants respectfully assert that Lear does not disclose, at least, that part of Applicants' claim 58 that is a method of reflecting light, wherein light reflected by the second reflector traverses the non-concave first surface before undergoing reflection at the first reflector.(Emphasis added).

Consequently, Applicants respectfully request allowance of claim 58.

### **Dependent claims 43-49, 51-57, and 59-61**

Since independent claims 42, 50, and 58 are allowable, their corresponding dependent claims 43-49, 51-57, and 59-61 respectively, are also allowable as a matter of law.

Applicants respectfully request allowance of claims 43-49, 51-57, and 59-61.

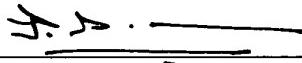
**Prior Art Made of Record**

The prior art made of record has been considered, but is not believed to affect the patentability of the presently pending claims.

## CONCLUSION

In light of the foregoing amendments and for at least the reasons set forth above, Applicant respectfully submits that all objections and/or rejections have been traversed, rendered moot, and/or accommodated, and that claims 42-61 are in condition for allowance. Favorable reconsideration and allowance of the present application and all pending claims are hereby courteously requested. If, in the opinion of the Examiner, a telephonic conference would expedite the examination of this matter, the Examiner is invited to call the undersigned at (770) 933-9500.

Respectfully submitted,

  
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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postage prepaid, in an envelope addressed to: Assistant Commissioner for Patents, Washington D.C. 20231, on

January 7, 2004  
Evelyn Sanders  
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